



Figure 20.--Comparison of the 7-day average maximum daily mile of the saltwater-freshwater interface computed by a relation to discharge with the position computed by a relation to specific conductance at Vereen's Marina (02110730), South Carolina for the 1986 water year.

WATER SUPPLY POTENTIAL

The long-term record generated using equation 5 for the period 1953-86 was used to develop flow-duration hydrographs using running 7-day average discharges. Figure 21 presents the duration hydrograph associated with the maximum 7-day and minimum 7-day running averages and 7-day running averages that were less than 90-, 50- and 10-percent of the values shown. The 1983 calendar year daily mean discharges are also shown on figure 21 to provide a comparison of discharges experienced in 1983 to those that can be expected for a longer period of record. It is evident from the information presented in figure 21 that periods of lower water-supply can be expected in some years during the months of August through October.

The relation between 7-day average discharge and 7-day average maximum incursion position of the interface shown in figure 19 can be used to determine the location of the saltwater-freshwater interface. The relation shown in figure 19 can be used in conjunction with the 7-day low-flow frequency curve in figure 12 to estimate the 7-day average maximum incursion position of the interface. As an example, the Q_{10} discharge, 192 ft³/s, from figure 11 can be entered on figure 19, which shows the corresponding 7-day average location of the interface to be at mile 355.5.